

## Mediterranean scrub junior

The Mediterranean scrub is an ecosystem distinguished by hot, dry summers and mild, wet winters. This greatly influences the vegetation that is therefore characterised by low, woody, perennial plants with small, hard leaves adapted to resist the summer drought.

The total annual precipitation is about 250-500 millimetres and occurs mainly in the winter months. In summer, the average monthly temperature often exceeds 20°C and in this biome, spells of bitter cold in winter are very rare.

The area that best characterises the Mediterranean scrub is the Mediterranean basin, but it can also be found in other areas of the world: in California, in Central Chile, in the southern tip of South Africa and in Southern Australia.

In this biome evergreen trees with both broad and needle-like leaves can be found. They include: holm-oaks, strawberry-trees, olive trees, laurels, carobs, pines, junipers, cypresses and others. There are also bushy plants such as the cistus, lentisk, myrtle and rosemary. The most typical plants are those capable of undergoing a rest period during the hot summer and of germinating and growing in the low autumn temperatures. Germination in autumn occurs only after a mild and damp period, to which the seed gets "acclimatised". Then the seed will grow and blossom in the heat of spring. Bulbous plants adopt another strategy: these perennial plants resist the summer heat thanks to underground bulbs and tubers, like many plants of the lily family (Liliaceae). Shrubs can be evergreen or can shed their leaves in the periods of maximum drought. Many plants possess perfumed aromatic substances whose function is to discourage animals that feed on them. In some cases, such as the *Artemisia californica*, these substances inhibit the growth of competing plants. The animals that live in the Mediterranean scrub are wild boars, roe deer, fallow deer, squirrels, foxes, wolves, badgers, rodents, tortoises, lizards and many species of birds. The soil fauna that includes snails, insects and earthworms has to undergo two dormant periods a year: during the cold winter (hibernation) and during the dry summer (aestivation). At the beginning of summer, the soil insects and other small animals move down several centimetres into the earth where they find the proper conditions to overcome the summer drought and wait for the autumn rains. Other animals can bear the dry weather in the daytime and become active at night.